



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,192	03/10/2004	Yoshiaki Nakayoshi	501.43529X00	2750

20457 7590 04/16/2007  
ANTONELLI, TERRY, STOUT & KRAUS, LLP  
1300 NORTH SEVENTEENTH STREET  
SUITE 1800  
ARLINGTON, VA 22209-3873

EXAMINER
----------

DHARIA, PRABODH M

ART UNIT	PAPER NUMBER
----------	--------------

2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/796,192	<b>Applicant(s)</b> NAKAYOSHI ET AL.	
	<b>Examiner</b> Prabodh M. Dharja	<b>Art Unit</b> 2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16 and 18-38 is/are allowed.
- 6) ☒ Claim(s) 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03-10-04</u> .  | 6) <input type="checkbox"/> Other: _____                          |

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 03-10-2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
3. **Status:** Please all the replies and correspondence should be addressed to Examiner's new art unit 2629. Receipt is acknowledged of papers submitted on 03-25-2004 under amendments and 03-10-2004 as a new application, which have been placed of record in the file. Claims 1-38, are pending in this action.

***Response to Amendment***

4. The amendment filed 03-25-2004 does not introduce any new matter into the disclosure, as specification has been amended to correct errors of a typographical and grammatical nature. The added material is supported by the original disclosure.

***Drawings***

5. Figure 53 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR

Art Unit: 2629

1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Eu (US 6,317,120 B1).

Regarding Claim 17 Eu teaches a liquid crystal display device (Col. 1, Lines 7-10) comprising respective pixels which are arranged in a matrix array (Col. 1, Lines 15-17) by arranging a plurality of pixel rows each of which includes a plurality of pixels arranged in parallel in one direction in another direction which crosses one direction, selects each pixel row in response to a scanning signal (Col. 1, Lines 33-42, in a matrix type display the pixel or cell are arranged at the intersection of the rows and columns, since scan lines are accessing pixels horizontally the pixels are arranged in the row and the gate of each of the pixels are controlled by additional switching circuitry please see figures 6,7) and supplies a video signal and a reference

Art Unit: 2629

signal which becomes the reference with respect to the video signal to the respective pixels in each selected pixel row (please see figure 6,7, Col. 1, Lines 33-46, Col. 5, Lines 35-39) wherein drain signal lines which supply the video signal are arranged to cross gate signal lines which supply the scanning signal and counter voltage signal lines which supply the reference signal, and the reference signal is supplied to the pixels for every selected pixel row (Col. 1; Lines 33-46) and, at the same time, a voltage value of the signal is set corresponding to a voltage value of the video signal supplied to the pixel row (Col. 1, Lines 33-46, Col. 5, Line 35 to Col. 6, Line 4, where LS- signal line helps per gate selection generates voltages for Vcom signal of the counter electrode of LCD cell (pixel)).

*Allowable Subject Matter*

8. Claims 1-16 and 18-38 allowed.

9. The following is an examiner's statement of reasons for allowance: After extensive search and consideration in PGPUB, IDS PTO 1449, the cited prior on PTO 892, prior art of (US 6,317,120 B1) fails to recite or disclose uniquely distinct features represented by underlined bold claim limitations below;

For Independent Claims 1-3,11,14 ,18 and 33-36

**the reference signal is supplied to the pixels for every selected pixel row and, at the same time, most of the gate signal lines and the counter voltage signal lines in other pixel rows except for the selected pixel rows are respectively configured to assume a floating state.**

For Independent Claims 31 and 32

when the signal is scanned and supplied to the next gate signal line, the switches are turned off in response to an OFF signal, and when the scanning signal is supplied to the further next gate signal line, the gate signal line to which the scanning signal is supplied at the two preceding stage is made to assume a floating state, and the respective gate signal lines are connected to a signal line to which the OFF signal is supplied through portions thereof which assume a floating state and diodes.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Washio; Hajime (US 7042431 B1) Image display device and driving method of the same

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M. Dharia whose telephone number is 571-272-7668.

The examiner can normally be reached on M-F 8AM to 5PM.

12. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

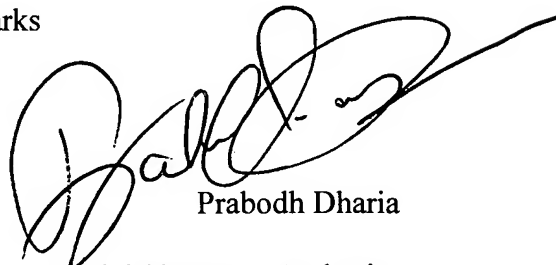
Art Unit: 2629

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

A handwritten signature in black ink, appearing to read 'Prabodh Dharia', with a long, sweeping horizontal line extending to the right.

Prabodh Dharia

Partial Signatory Authority

AU 2629

March 11, 2007